Claims

1. An oscillation generating device for use in a soil compacter with a first unbalance shaft pair (2) and a tipping moment compensation device (3), characterized in that a second unbalance shaft pair (3) is arranged adjacent to the first unbalance shaft pair as a tipping moment compensation device (3), and that the unbalance shaft pairs (3, 4) [sic; 2, 3] rotate in opposite directions, and diagonally opposite unbalance shafts (4, 4'; 5, 5') rotate in the same direction.

2. The oscillation generating device according to Claim 1, characterized in that the unbalance shafts (4, 5) of the one unbalance shaft pair (2) are aligned pairwise with the unbalance shafts (4', 5') of the other unbalance shaft pair (3).

3. The oscillation generating device according to Claim 1, characterized in that the unbalance shafts (4, 5) of the one unbalance shaft pair (2) are offset in crossed symmetry, and in an axially parallel manner, relative to the unbalance shafts (4', 5') of the other unbalance shaft pair (3).

4. The oscillation generating device according to Claim 3, characterized in that the spacings of the diagonally opposite unbalance shafts (4, 4'; 5, 5') are different.

5. The oscillation generating device according to Claim 3 or 4, characterized in that the unbalance shafts (4, 4'; 5, 5') are located in one plane.

6. The oscillation generating device according to Claim 3 or 4, characterized in that the unbalance shafts (4, 4'; 5, 5') are arranged spatially offset relative to each other.

7. The oscillation generating device according to one of the preceding claims, characterized in that each unbalance shaft pair [sic; mass] (3, 4) comprises an unbalance shaft (10) with changeable phase position.

8. The oscillation generating device according to Claim 7, characterized in that a synchronization device for synchronously adjusting the phase relationship is present.

9. The oscillation generating device according to Claim 7 or 8, characterized in that the synchronization device is designed for the common phase adjustment in the same direction of both unbalance shaft pairs (3, 4).

10. The oscillation generating device according to Claim 7 or 8, characterized in that a device is present for independent phase adjustment.

11. The oscillation generating device according to one of Claims 8 to 10, characterized in that the synchronization device comprises a hydraulically operated flow divider.

12. The oscillation generating device according to one of the preceding claims, characterized in that at least diagonal unbalance shafts (4, 4'; 5, 5') are coupled so that they rotate in unison.

13. The oscillation generating device according to Claim 12, characterized in that all unbalance shafts (4, 4'; 5, 5') are coupled so that they rotate in unison.

14. The oscillation generating device according to Claim 12 or 13, characterized in that the coupling rotating in unison consists of a transmission (25) with two crown gears (6), and spur gears (7, 8) on the unbalance shafts (4, 4') and (5, 5') meshing with them.

15. The oscillation generating device according to Claim 14, characterized in that the transmission (25) is operatively connected to a single drive (1).